

U 1-23-03 61

AF/1600

In re the application of Freeman, et al.

Case Docket No. RPI-004C3CN

Serial No. 09/425,516

Filed: October 22, 1999

For: METHODS FOR INHIBITING THE INTERACTION OF B7-2 WITH ITS
NATURAL LIGAND (as Amended)

Mail Stop: AF
COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, VA 22313-1450

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JUL 25 2003

TECH CENTER 1600/2900

Sir:

Transmitted herewith for filing in connection with the above-identified application are the following:

- ☒ Declaration of Megan E. Williams (3 pages)
- ☒ Copy of Deposit Contract to HA5.2B7 (2 pages)
- ☒ Copy of Deposit Contract to HF2.3D1 (2 pages)
- ☒ Copy of Deposit Contract to HA3.1F9 (2 pages)
- ☒ Acknowledgment Receipt from ATCC (1 page)
- ☒ Amendment (25 pages, including Appendix A)
- ☒ Submission of Formal Drawings (2 pages)
- ☒ Thirty-four (34) sheets of Formal Drawings (Figs. 1A-27)
- ☒ Notice of Draftsperson's Patent Drawing Review (1 page)

The fee has been calculated as shown below:

(Col. 1)		(Col. 2)		(Col. 3)
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA
TOTAL	* 52	MINUS	** 52	= 0
INDEP.	* 7	MINUS	*** 7	= 0
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEP. CLAIM				

SMALL ENTITY	
RATE	ADDIT. FEE
x 9 =	\$ 0.00
x 42 =	\$ 0.00
+140 =	\$ 0.00
TOTAL ADDIT. FEE	\$ 0.00

OTHER THAN A SMALL ENTITY	
RATE	ADDIT. FEE
x 18 =	\$ 0.00
x 84 =	\$ 0.00
+ 280 =	\$ 0.00
TOTAL	\$ 0.00

- * If the entry in Col 1 is less than the entry in Col. 2, write "0" in Col. 3.
- ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
- *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- ☐ A check in the amount of _____ is enclosed for presentation of extra claims.
- ☐ A check in the amount of _____ is enclosed for .
- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed.
 - ☐ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.
 - ☒ Any patent application processing fees under 37 CFR 1.17.

- ☒ Please charge any additional fees or credit any overpayments associated with this communication to our Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed. Applicants request any extensions of time necessary to respond.

CERTIFICATE OF EXPRESS MAILING"Express Mail" mailing label number EL 931 676 379 USDate of Deposit July 22, 2003

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop: AF, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

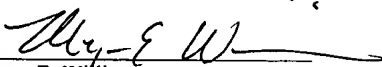
Signature

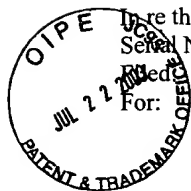
Megan E. Williams

Please Print Name of Person Signing

LAHIVE & COCKFIELD, LLP

Attorneys at Law

By 
Megan E. Williams
Reg. No. 43,270
28 State Street
Boston, MA 02109
(617) 227-7400
Telecopier (617) 742-4214



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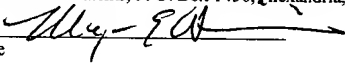
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Signature



Megan E. Williams

Please Print Name of Person Signing

LAHIVE & COCKFIELD, LLP

Attorneys at Law

By 
Megan E. Williams

Reg. No. 43,270

28 State Street

Boston, MA 02109

(617) 227-7400

Telecopier (617) 742-4214



American Type Culture Collection

12301 Parklawn Drive • Rockville, MD 20852 USA • Telephone: (301)231-5520 Telex: 898-055 ATCCNORTH • FAX: 301-770-2587

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT ISSUED PURSUANT TO RULE 7.3
AND VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

To: (Name and Address of Depositor or Attorney)

Repligen Corporation
Attention: Edward A. Greenfield
One Kendall Square, Building 700
Cambridge, MA 02139

RECEIVED

JUL 25 2003

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Deposited on Behalf of: Repligen Corporation

Identification Reference by Depositor:

ATCC Designation

Hybridoma cells, HF2.3D1

HB 11686

Hybridoma cells, HA5.2B7

HB 11687

Hybridoma cells, HA3.1F9

HB 11688

The deposits were accompanied by: a scientific description a proposed taxonomic description
indicated above.

The deposits were received July 19, 1994 by this International Depository Authority and have been
accepted.

AT YOUR REQUEST:

☒ We will inform you of requests for the strains for 30 years.

The strains will be made available if a patent office signatory to the Budapest Treaty certifies one's
right to receive, or if a U.S. Patent is issued citing the strains.

If the cultures should die or be destroyed during the effective term of the deposit, it shall be your
responsibility to replace them with living cultures of the same.

The strains will be maintained for a period of at least 30 years after the date of deposit, and for a
period of at least five years after the most recent request for a sample. The United States and many
other countries are signatory to the Budapest Treaty.

The viability of the cultures cited above was tested July 26, 1994. On that date, the cultures were
viable.

International Depository Authority: American Type Culture Collection, Rockville, Md. 20852 USA

Signature of person having authority to represent ATCC:

Bobbie A. Brandon

Date: July 27, 1994

Bobbie A. Brandon, Head, ATCC Patent Depository

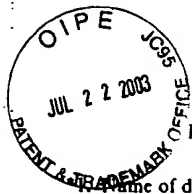
cc: C. Geoffrey David, Ph.D.
Amy Mandragouras



Budapest Treaty Deposits

American Type Culture Collection

12301 Parklawn Drive • Rockville, MD 20852 USA • Telephone: (301)881-2600 Telex: 898-055 ATCC NORTH



TO DEPOSIT OR TO CONVERT A DEPOSIT TO MEET THE REQUIREMENTS OF
BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE
DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

CEIVED

JUL 25 2003

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Name of deposit (microorganism, cell, seed, plasmid, etc.) Hybridoma Cells

2. Strain designation given by the depositor (number, symbols, etc.) HF2.3D1

3. Is this an original deposit under the Budapest Treaty? Yes

4. Is this a request for a conversion of a deposit already at the ATCC to meet the requirements of the Budapest Treaty? (If so, indicate ATCC designation.) No

5. Is this deposit a mixture of microorganisms or cells? No

6. Details and conditions necessary for the cultivation of the strain, for its storage and for testing its viability and also, where a mixture of microorganisms is deposited, descriptions of the components of the mixture and at least one of the methods permitting the checking of their presence. 10% FBS in DMEM Base, 2mM

L-Glutamine, 10% NCTC-109

An indication of the properties of the strain which are or may be dangerous to health or the environment, or an indication that the depositor is not aware of such properties. None

*8. It is recommended that sufficient description be provided to allow the ATCC to confirm that the strain deposited generally conforms to that which the depositor states is being deposited (i.e., Gram negative rod).

a. For cell culture deposits please complete. Is the cell being cultured in the presence of antibiotics (if so list the antibiotics) Yes, Penicillin/Streptomycin

b. For hybridoma deposits please complete. What is the isotype of antibody produced? IgG2a

*9. Is this strain zoopathogenic? No phytopathogenic? No

10. Does this strain contain plasmids relevant to the patent process? No

If so, what physical containment level is required for experiments as described in the National Institutes of Health Guidelines involving Recombinant DNA Molecules (i.e., P1, P2, P3 and P4 facility)?

*The answers to these questions are recommended but not required.

FOR ATCC USE ONLY

ATCC DESIGNATION _____

DATE CULTURE RECEIVED _____

DATE VIABILITY TEST COMPLETED _____

12. In addition to those entitled to a sample under the Budapest Treaty, do you wish the strain made available to (Those entitled to a sample under the European Patent Convention and countries signatory to the Budapest Treaty will receive samples.):

a. Anyone who requests a culture (no restrictions on distribution from date of deposit or conversion to Budapest)?

No

b. Other countries which are not signatory to the Budapest Treaty? Please state which countries: No

After a U.S. Patent issues, the ATCC makes the culture available to anyone who requests it.

13. Do you wish the ATCC to inform you of all requests for this strain? (This is allowed under the Treaty, but if you waive the right, the fee is reduced.) Yes

14. Would you like to be notified via telex or telephone of the ATCC number assigned to your strain (Fee: \$10.)? Yes

FAX:

Telex No. (617) 227-5941 Amy Mandragouras Telephone No. _____

15. Viability testing certificate and contracts should be directed to:

Repligen Corporation (C. Geoffrey Davis, Ph.D.)

One Kendall Square, Bldg. 700

Cambridge, MA 02139

16. Check in payment of service must accompany the deposit unless prior arrangements are made and approved. If arrangements have been made to bill you for services, an invoice should be sent to:

17. Name and address of attorney (to whom information will be made available if you complete):

Amy Mandragouras, Lahive & Cockfield, 60 State Street, Boston, MA 02109

18. Additional comments: This material is cited in a U.S. and/or other patent applications
and may not be used to infringe the patent claims.

I understand and agree that the deposit may not be withdrawn by me for the period specified in Rule 9.1 of the Budapest Treaty (at least 30 years after the date of deposit), and that if a strain should die or be destroyed during the life of the patent, or the period of time so specified, it is my responsibility to replace it with a living culture of the same organism or cell. In the cases of viruses, cell cultures, plasmids and seeds, it is my responsibility to supply a sufficient quantity for distribution for the period of time specified above.

DATE 7/18/94

SIGNATURE OF DEPOSITOR

Repligen Corporation

On behalf of (Name of company or institution if signed on their behalf)
(must be completed)

Edward A. Greenfield

(Typed name of Depositor)

Address:

Repligen Corporation

One Kendall Square, Bldg. 700

Cambridge, MA 02139

THIS FORM MUST BE COMPLETED IN ENGLISH

ADDRESS SHIPMENTS AND FORM TO THE ATTENTION OF:

Mrs. Bobbie A. Brandon
American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852 USA

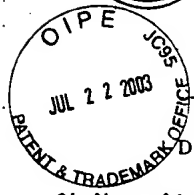
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1. Name of deposit (microorganism, cell, seed, plasmid, etc.) Hybridoma Cells
2. Strain designation given by the depositor (number, symbols, etc.) HA3.1F9
3. Is this an original deposit under the Budapest Treaty? Yes
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6. Details and conditions necessary for the cultivation of the strain, for its storage and for testing its viability and also, where a mixture of microorganisms is deposited, descriptions of the components of the mixture and at least one of the methods permitting the checking of their presence. 10% FBS in DMEM Base, 2mM
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An indication of the properties of the strain which are or may be dangerous to health or the environment, or an indication that the depositor is not aware of such properties. None

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b. For hybridoma deposits please complete. What is the isotype of antibody produced? IgG1

- *9. Is this strain zoopathogenic? No phytopathogenic? No
10. Does this strain contain plasmids relevant to the patent process? No
If so, what physical containment level is required for experiments as described in the National Institutes of Health Guidelines involving Recombinant DNA Molecules (i.e., P1, P2, P3 and P4 facility)?

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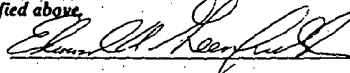
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7/18/94

SIGNATURE OF DEPOSITOR



Repligen Corporation

Edward A. Greenfield

On behalf of (Name of company or institution if signed on their behalf)
(must be completed)

(Typed name of Depositor)

Address: Repligen Corporation

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Cambridge, MA 02139

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Attorney Docket No.: RPI-004C3CN

Group Art Unit: 1644

Examiner: P. Gambel

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above and is addressed to Mail Stop: AF, Commissioner for Patents, P. O. Box 1450,
Alexandria, VA 22313-1450.

Signature

Megan E. Williams

Please Print Name of Person Signing

SUBMISSION OF FORMAL DRAWINGS

Dear Sir:

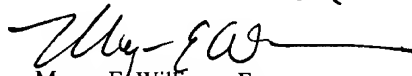
In response to the Final Office Action mailed from the USPTO on April 22, 2003,
submitted herewith is one set (thirty-four sheets, twenty-seven figures) of formal drawings for
filing in the above-identified patent application. Kindly substitute the enclosed formal drawings
for the drawings previously submitted in the above-identified patent application. A copy of the

Notice of Draftsperson's Patent Drawing Review dated September 20, 2002 is also enclosed herewith.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. RPI-004C3CN from which the undersigned is authorized to draw.

Respectfully submitted,

LAHIVE & COCKFIELD, LLP

A handwritten signature in black ink, appearing to read 'Megan E. Williams', with a long horizontal flourish extending to the right.

Megan E. Williams, Esq.
Registration No. 43,270
Attorney for Applicants

28 State Street
Boston, MA 02109
Tel. (617) 227-7400
Dated: July 22, 2003

JUL 22 2003
PATENT & TRADEMARK OFFICE

Form PTO 948 (Rev. 03/02)

U.S. DEPARTMENT OF COMMERCE - Patent and Trademark Office

Application No.

09/425576

NOTICE OF DRAFTSPERSON'S
PATENT DRAWING REVIEW

RECEIVED

JUL 25 2003

TECH CENTER 1600/2900

The drawing(s) filed (insert date) 8/28/02 are:

A. ☐ approved by the Draftsperson under 37 CFR 1.84 or 1.152.

B. ☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

<p>1. DRAWINGS. 37 CFR 1.84(s): Acceptable categories of drawings: Black ink. Color. Color drawings are not acceptable until petition is granted. Fig(s) _____ Pencil and non black ink not permitted. Fig(s) _____</p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b) 1 full-tone set is required. Fig(s) _____ Photographs may not be mounted. 37 CFR 1.84(e) Poor quality (half-tone). Fig(s) _____</p> <p>3. TYPE OF PAPER. 37 CFR 1.84(e) Paper not flexible, strong, white, and durable. Fig(s) _____ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) <u>4-27</u> Mylar, velum paper is not acceptable (too thin). Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: 21.0 cm by 29.7 cm (DIN size A4) 21.6 cm by 27.9 cm (8 1/2 x 11 inches) All drawing sheets not the same size. Sheet(s) _____ Drawings sheets not an acceptable size. Fig(s) _____</p> <p>MARGINS. 37 CFR 1.84(g): Acceptable margins: Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm SIZE: A4 Size Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm SIZE: 8 1/2 x 11 Margins not acceptable. Fig(s) _____ Top (T) _____ Left (L) _____ Right (R) _____ Bottom (B) _____</p> <p>6. VIEWS. 37 CFR 1.84(h) REMINDER: Specification may require revision to correspond to drawing changes. Partial views. 37 CFR 1.84(h)(2) Brackets needed to show figure as one entity. Fig(s) _____ Views not labeled separately or properly. Fig(s) _____ Enlarged view not labeled separately or properly. Fig(s) _____</p> <p>7. SECTIONAL VIEWS. 37 CFR 1.84 (h)(3) Hatching not indicated for sectional portions of an object. Fig(s) _____ Sectional designation should be noted with Arabic or Roman numbers. Fig(s) _____</p>	<p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k) Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l) Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) _____</p> <p>11. SHADING. 37 CFR 1.84(m) Solid black areas pale. Fig(s) _____ Solid black shading not permitted. Fig(s) _____ Shade lines, pale, rough and blurred. Fig(s) _____</p> <p>12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p) Numbers and reference characters not plain and legible. Fig(s) _____ Figure legends are poor. Fig(s) _____ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s) _____ English alphabet not used. 37 CFR 1.84(p)(2) Figs _____ Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3) Fig(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q) Lead lines cross each other. Fig(s) _____ Lead lines missing. Fig(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(i) Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u) Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____</p> <p>16. CORRECTIONS. 37 CFR 1.84(w) Corrections not made from prior PTO-948 dated _____</p> <p>17. DESIGN DRAWINGS. 37 CFR 1.152 Surface shading shown not appropriate. Fig(s) _____ Solid black shading not used for color contrast. Fig(s) _____</p>
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COMMENTS

REVIEWER S. Field

DATE 9/20/02

TELEPHONE NO. 17

ATTACHMENT TO PAPER NO. _____